UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,019	10/01/2003	Venkatachalam Eswarakrishnan	1796A1	9521

7590 05/09/2007

PPG INDUSTRIES, INC.
Intellectual Property Department
One PPG Place
Pittsburgh, PA 15272

EXAMINER	
MAYEKAR, KISHOR	
ART UNIT	**PAPER NUMBER**
1753	

MAIL DATE	DELIVERY MODE
05/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/677,019	ESWARAKRISHNAN ET AL.	
	Examiner	Art Unit	
	Kishor Mayekar	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *02/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102 and § 103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-7, 16-26, 29, 30, 32, 33, 35 and 44-52 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Honig et al. (US 6,174,422 B1) in light of Zwack et al. (US 5,948,229). Honig's invention is directed to an acid-free catalyst paste for use in a cathodic electro-dip coating. Honig discloses that the catalyst paste comprises dialkylttin oxide, such as dioctyl oxide, and a water-thinnable cationic binder resin, wherein the cationic binder resin can be resin used in the cathodic

electro-dip coating (see abstract and col. 2, lines 8-11 and lines 47-56). As to the use of the catalyst paste in the cathodic electro-dip coating, Honig discloses that a cationic resin composition for the cathodic electro-dip coating comprises an active hydrogen-containing, cationic salt group-containing resin which may be self-crosslinking or in admixture with known crosslinking agents (paragraph crossing cols. 4 and 5). Honig also disclose that it is known to use catalyst for the crosslinking to reduce the curing temperature (col. 1, lines 15-17). As to the self-crosslinking resin, Zwack shows in a cathodic electro-dip coating a know cationic resin composition comprising an active hydrogen-containing cationic salt group-containing resin, a blocked polyisocyanate curing agent and an organotin-containing catalyst, wherein the curing agent may be fully blocked polyisocyanate, or partially blocked and reacted with the active hydrogen-containing cationic salt group-containing resin (col. 5, lines 7-16 and Example), and wherein the catalyst includes dioctyl oxide and is typically used in an amount of about 0.05 to about 1 percent by weight based on weight of total solids in the cationic resin composition (col. 5, lines 54-62). Zwack also shows that the cationic resin composition is typically cured at temperature from 325 to 340 °F (col. 7, lines 39-61). Since Honig in light of Zwack discloses a cationic resin composition comprises all the elements as claimed, it anticipates the above claims. If there is a difference, it will be the overlapping of the curing temperature and/or the amount of the catalyst. It has been held that the disclosure in the prior art of any value within the claimed range is an anticipation of that range. And a prima facie case of obviousness exists in the case

where the claimed range overlaps range disclosed by the prior art, *In re Wertheim* 191 USPQ 90.

As to the subject matter of claims 25 and 26, the recited ratio (the obtained product) cannot be given any patentable weight.

4. Claims 8-10, 27, 31, 34 and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honig '422 in light of Zwack '229 and in view of Zwack '229. The difference between the reference as applied above and the instant claims is the resin. Zwack as applied above shows the limitation (col. 1, line 64 through col. 4, line 60). The subject matter as whole would have been within the level of ordinary skill in the art at the time the invention was made to have modified the reference's teachings as shown by Zwack because the selection of any of known equivalent cationic salt group-containing resins would be within the level of ordinary skill in the art.

5. Claims 11-15, 28 and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honig '422 in light of Zwack '229 and in view of Nishiguchi et al. (US 6,761,973 B2). The difference between the reference as applied above and the instant claims is the recited blocking agent. Nishiguchi shows the limitation in a cationic resin composition (see abstract). The subject matter as whole would have been within the level of ordinary skill in the art at the time the invention was made to have modified the

reference's teachings as shown by Nishiguchi because the selection of any of known equivalent blocking agents would be within the level of ordinary skill in the art.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kishor Mayekar
Primary Examiner
Art Unit 1753